Faculty Working Paper 93-0161

Higher-Order Organization and Commitment in Strategic Options Theory

Ron Sanchez
Department of Business Administration
University of Illinois

Bureau of Economic and Business Research
College of Commerce and Business Administration
University of Illinois at Urbana-Champaign

BEBR

FACULTY WORKING PAPER NO. 93-0161

College of Commerce and Business Administration

University of Illinois at Urbana-Champaign

September 1993

Higher-Order Organization and Commitment in Strategic Options Theory

Ron Sanchez

Department of Business Administration

Higher-Order Organization and Commitment in Strategic Options Theory

by
Ron Sanchez
Department of Business Administration
University of Illinois, Champaign, Il 61820

In his thoughtful commentary (Bartlett 1993) on my effort (Sanchez 1993) to outline a theory of strategic management derived from the basic insights of options theory, Christopher Bartlett expressed some substantive concerns about the feasibility and desirability of approaching strategic management as a process of optimizing strategic options. Of the several issues he raised, the most fundamental are his concerns (1) about the potentially debilitating effects on an organization's strategic independence and capacity for learning of using networks and markets to source important resources and capabilities and (2) about the vital role of strategic organizational commitment and its possible incompatibility with strategies based on creating and maintaining strategic options. These concerns have also been expressed to me by other strategy thinkers, and therefore in the comments below I try to make clear what I believe are (and are not) the implications for strategic independence, organizational learning, and commitment of an options approach to strategic management.

STRATEGIC INDEPENDENCE AND ORGANIZATIONAL LEARNING

A concern often raised when one suggests that a firm can gain significant strategic flexibility by using networks and markets to source important resources and capabilities, is that a firm pursuing such a strategy may eventually suffer a "long-term loss of strategic independence and organizational learning capacity" (Bartlett 1993, p. 294).

I will take a strong position regarding the first concern and maintain that ***strategic independence is illusory and unattainable in dynamic product markets.*** Instead, *strategic interdependence* is the salient feature of successful firms in dynamic markets, for the simple reason that no single firm can reasonably expect to internalize all the resources and capabilities that might be needed to survive in the long run in dynamic markets. Therefore, the only way a firm can hope to have access to the array of resources and capabilities it might need in the future is to develop skills in accessing resources and capabilities external to the firm, either through networks or market sources of supply.

Certainly one can readily think of examples of firms that have not wisely or skillfully managed their network and market supply arrangements -- and that as a result have lost access to critical inputs or found themselves at the mercy of an opportunistic supplier. The failures of some firms to maintain critical sources of supply, however, ought not to be construed as a failure of strategic interdependence *per se* as a viable means of sourcing critical inputs; rather, they should be taken as examples for further study to determine why those firms failed to recognize, establish, or maintain mutually beneficial incentive structures which would assure the continuing cooperation of their suppliers. While such examples do not refute the strategic usefulness of outsourcing or cure the inevitability of interdependence in dynamic markets, they can serve a useful purpose by highlighting the need for managers to be mindful of the long-term strategic options that may be created or foreclosed through effective or ineffective management of supplier relationships.

As to the second concern that the learning capacity of the the firm as an organization may be diminished by outsourcing important resources and capabilities, I suggest that it is important to recognize that the possible diminution of *intra-organizational* learning capacity which may follow when a firm outsources a

particular activity may be compensated by the increased opportunities the firm acquires thereby for *inter-organizational* learning. ***The learning which the firm achieves through creating and exercising its strategic options to provide products and services can enhance not only the core competencies and other capabilities of the firm, but also those of its network partners and even its market suppliers.*** Thus, to the extent that a firm is capable of being both a good learner and a good teacher, as well as potentially a creator of new knowledge, the firm may be able to create a dynamic incentive structure that rewards continuing cooperation by suppliers, customers, and other allies.

Especially in outsourcing components and technologies through network relationships, mutual interorganizational learning seems to be the essential currency of transaction without which network relationships are unlikely to last or remain productive of strategic options. Since a significant level of outsourcing is an inevitability in dynamic markets, a firm's strategic managers must demonstrate skill in promoting inter-organizational, mutually beneficial learning as an essential counterpart to intra-organizational learning and as the cornerstone of network and supplier relationships that expand the base of resources and capabilities (and thus the strategic options) available to the firm.

To become strategically flexible, a firm will not only have to develop interorganizational learning capabilities; ***it will also have to learn to be quick to re-configure its own internalized capabilities and processes and its linkages to other firms*** in order to respond advantageously to the rapidly changing circumstances of dynamic markets. This model of the firm as a strategically flexible and nimble organization raises the concern that the options perspective underestimates the "administrative complexities involved in developing and exploiting resources and capabilities," particularly the "development and management of complex linkages of various assets and resources through organizational routines that are particular to the specific application" (Bartlett 1993, p. 296).

I suggest that such concerns, in turn, implicitly raise the question of whether complex administrative routines and idiosyncratic linkages are universal, immutable mechanisms that characterize the way all organizations function. If so, the universality and immutability of such organizational mechanisms would argue persuasively against a normative theory of strategy in which the flexible and nimble firm plays the central role. If we look at markets which have suddenly become much more dynamic, we can find ample evidence that the formation of complex,

idiosyncratic routines is a strong tendency in organizations. We can observe many outright failures and many firms in great difficulty as they struggle to re-configure themselves to be more flexible and nimble in responding to rapidly changing circumstances. Witness, for example, the recent problems of IBM, DEC, and Apple in responding to rapid changes in their respective computer markets. But we can also observe that ***some firms are learning how to be more responsive to unpredictable change by simplifying their administrative routines and streamlining their internal and external linkages.*** Of especial interest is the appearance of many new firms that seem to be a distinct new type of organization, a *de novo* kind of "virtual" or "modular" firm. These new firms seem to be intentionally organized around simplified, streamlined procedures and standardized "quick connect" interfaces with other firms for the explicit purpose of improving the firm's ability to adapt rapidly to rapid and unpredictable changes in its environment.

On further inspection, we would find that these new kinds of firms (and the survivors among the newly restructured firms, as well) have come to rely on networks and markets for many resources and capabilities which they previously internalized -- and that as a result they are able to focus more effectively on developing the core competencies that give them the greatest leverage in creating and exercising strategic options. We would also observe that internalizing only the core, options-rich resources and capabilities has enabled such firms (1) to create more direct and effective linkages within their reduced set of internalized resources and capabilities; (2) to develop new capabilities in leveraging the firm's core competencies by quickly coupling the firm's core competencies with complementary resources and capabilities from networks and markets; and (3) to devise and institutionalize higher-order organizational structures and processes capable of quickly adapting a smaller (and therefore more manageable) set of core resources and capabilities to the changing requirements of a dynamic environment.

In other words, what we are tempted to conclude from studying dynamic markets is not that organizations must always function in immutably complex (and dynamically inefficient!) ways, but rather that organizations can evolve into new forms that can move more quickly and effectively to create and exploit strategic options. Of course, the evolution of increasingly flexible organizations changes the nature of the competitive environment such firms face. Thus, in dynamic markets we can readily see a spiraling co-evolution of organizational forms and competitive environments towards increasingly greater organizational capabilities for flexibility

and, as a result, towards increasingly more intense competitive demands for organizational flexibility placed on firms that would compete in dynamic markets.

Undeniably, some firms have been unable to break free from the administrative complexities and idiosyncracies that restrict their strategic flexibility. But by skillfully cultivating strategic interdependence instead of pursuing an unattainable goal of strategic independence, by exploiting inter-organizational learning opportunities in place of pursuing exclusively intra-organizational learning, and by experimenting with new organizational structures and processes that promise flexibility and speed in responding to change, some new organizations appear to be fully capable of creating and sustaining higher order organizational dynamics that let the firm continually re-define and re-configure itself. If at least some organizations can fundamentally change the way they function in an effort to reap the benefits of being strategically flexibile in a dynamic environment, we should be careful to let our ideas about how organizations might function change accordingly.

STRATEGIC COMMITMENT

I have suggested that in dynamic markets, the central task of strategic managers is managing the process of identifying, creating, and exercising the firm's most advantageous set of strategic options (Sanchez 1993). This view of the central task of strategic managers has raised a number of concerns about the kind of organizational culture that would result when a firm's senior managers take this view of their primary management responsibility. For example, there is concern that "applying a financial concept to a largely human process" reduces the human processes involved in identifying, creating, and exercising strategic options to a "mechanical, transaction-based perspective" (Bartlett 1993, p. 296) . There is also concern that a strategy that relies extensively on external resources and capabilities or that may defer important resource commitments or make them contingent on favorable future outcomes can create an environment in which "the front lines of the organization become demotivated ...[when] their ideas or proposals are either shelved or shopped around, while their projects limp along in a netherworld of semicommitment, waiting for market trends to become clear" (Bartlett 1993, p. 297). This expected undesirable state of affairs may even be contrasted with the "much

clearer vision of organizational purpose and strategic objectives" that characterize "high-commitment organizations" like WalMart, Honda, or Sony, which are said to have benefited from "the power of a management approach that leads the company to make major resource commitments which often could not be justified by any rational analysis of the firm's strategic position or capabilities" (Bartlett 1993, p. 297).

As for the first concern, there is always legitimate basis for concern that techniques of financial valuation may be applied too zealously or narrowly, especially when important (usually human) variables are excluded from consideration because they cannot be assigned precise financial values. I would suggest, however, that organizations that make appropriate efforts to assess the economic value of the various options they might create do not thereby demean or dehumanize the human beings or processes that must create those options. On the contrary, my experience has often been that managers and front-line staff who understand the irreducible uncertainty inherent in dynamic markets seem quite naturally and intuitively to understand the economic and strategic value of creating options for an uncertain future -- and the need to assess the relative value (in a comprehensive sense) of the various options the firm might create.

Further, if a firm elects to rely on external suppliers of resources or capabilities, or if internally generated ideas are "shopped around" or held in abeyance until circumstances are more favorable, it is undeniable that demotivation of staff may occur *if* the firm's employees have not clearly understood that flexibility in sourcing inputs and careful timing in exercising options are central to a strategy of strategic flexibility -- and that such a strategy offers the firm and its employees their best chance of survival and success in dynamic markets. Thus, ***a key task of strategic managers is to continually focus the attention of all firm members on the core processes that are the source of the firm's distinctive competencies,*** so that all employees can see beyond the inevitable vagaries of product-level decisions to the underlying continuity of the firm's strategy of flexibility and to the processes and capabilities that create the firm's strategic flexibility.

As for the second set of related concerns derived from the view that strategic flexibility is incompatible with strategic commitment, I will conclude this commentary by calling into question two notions that typically seem to underlie such concerns: first, the notion that commitment *per se* in any sense constitutes a strategy, and second, the notion that a strategy intent upon creating strategic flexibility is antithetical to and incompatible with strategic organizational

commitment.

Both for the sake of a lively discussion and because I think it happens to be accurate, I will offer the opinion that the act of organizational commitment has been and continues to be greatly overemphasized in the strategy literature, typically in a form of theoretical myopia that looks only at the last and most visible step in what is typically a long, multi-step strategic process leading up to the act of commitment. A narrow focus on the act of commitment and the successes that (sometimes) follow commitment runs the risk of ignoring the strategic processes of selecting and building competencies, debating alternative courses of action, and undertaking numerous exploratory initiatives that typically *precede* the eventual act of organizational commitment and contribute significantly to improving the chances that commitment may lead to success. For the purposes of understanding both the content and processes of a competitive strategy, therefore, I would suggest that the act of commitment can most usefully be viewed simply as the exercise of a strategic option. As such, ***the important aspect of organizational commitment for strategy theory is not the act of commitment itself, but rather the prior efforts of strategic managers and others in an organization to create a strategic option worthy of commitment.***

As for the supposed incompatibility of strategic flexibility with strategic commitment, it should be apparent that a strategy based on strategic options can only be of benefit to a firm if at least some of the options the firm works hard to create are exercised. To suggest that a strategically flexible firm would dither in a "netherworld of semicommitment" is to deny the fundamental objective of such a strategy -- which is to create the most advantageous possible set of opportunities (*i.e.*, options) for the firm to take action now and in the future. Furthermore, decisive commitment to a course of action is more likely to be sensible (and successful) when it is part of a strategy of keeping your options open -- *i.e.*, ***not*** making commitments -- until you are as sure as you can be that making a commitment is the most advantageous course of action available to the firm.

Without doubt, a well-considered act of commitment may provide clarity of purpose that can focus an organization's efforts and may even motivate a higher than usual level of effort by individuals within the organization who understand and agree with the objectives committed to. In many cases, it may also be sensible to make a "high commitment" to an ambitious goal as well, since to set an organization's sights too low may cause the firm to miss many potential options for

growth and development that it might otherwise discover in the future. Thus, "high commitments" may help a firm achieve the strategic "stretch" (Prahalad and Hamel 1993) that helps a firm move beyond its present capabilities. Beyond these considerations, however, to ascribe to commitment the power to assure some measure of success to a firm that makes resource commitments that cannot be justified by any rational analysis, is to impute some quasi-magical power to commitment *per se*, which may in turn result in a failure to investigate adequately the strategic processes that created the option to make a commitment and improved the chances that exercise of the option (*i.e.*, commitment) would result in success.

Another look at Sony should illustrate these points. Sony has often been characterized as "a model of a classic high-commitment, internal-capability company" (Bartlett 1993, p.297). I would suggest that for the purpose of gaining insight into Sony's competitive strategy, such characterizations are incomplete and, taken alone, are inadequate to explain Sony's impressive competitive successes in highly dynamic markets. If one looks beyond the many highly visible commitments which Sony has made and investigates more closely Sony's use of its impressive -- but tightly focussed -- internal capabilities, I believe one can in fact observe the workings of a consummate practitioner of options-driven strategic management. As cases in point, consider the following alternative interpretations of two examples of product development by Sony that are often characterized as "high commitments" demanding "massive resource commitments for specific product developments well in advance of market development" (Bartlett 1993, p.297).

In the 1980s, Sony succeeded in creating a new consumer product market with its introduction and marketing of the Sony Walkman. Sony's development of the Walkman (see Sanderson and Uzumeri 1989) is illustrative of Sony's options-driven strategic management in the 1980s and beyond. Although product development was driven forward by a small multifunctional team highly committed to transforming a challenging new product concept into a real product, the strategy which Sony pursued in developing the Walkman (as in other Sony products in the 1980s and 1990s [Sanchez 1991]) created a large set of product model options that Sony was able to exercise *at relatively low cost*. Analysis of the engineering design of the Walkman models suggests that Sony radically lowered the total cost of developing and producing a large number of Walkman models by making extensive use of existing "off-the-shelf" components readily available from Sony suppliers, by using engineering skills in system design to proliferate a variety of models from a few

"platform" designs, and by focussing Sony's own internal development efforts on a key technologies and components (like thin circuit boards) which promised to create options for extensive variations on the new product concept and for improved models in the future.

By radically lowering the overall cost of developing and producing a large number of new product variations, Sony created a large number of product options which it could test at low cost by directly offering small lots of actual products to the market -- a practice which Sanchez and Sudharshan (1992) have termed "real-time market research." Although Sony would no doubt like its competitors to believe that producing many models of an unproven new product concept must involve massive resource commitments in advance of market development, an alternative view derived from analysis of Sony's technological capabilities, engineering designs, and product family structure suggests that Sony has effectively pursued a strategy of developing key technologies and engineering skills that enable Sony to create a wide range of new product options at low total cost of development and production.

From this perspective, the key strategic act by Sony's managers in product development, therefore, does not appear to be an act of high commitment to expensive new product development in advance of market development. Rather, the key strategic acts appear to be (1) the *insight* by Sony's strategic managers that a great number of consumer electronics product options could be created at low cost by combining some key technological capabilities and product engineering skills with a product design regime explicitly focussed on yielding a large number of new product options, and (2) the *creation* by Sony management of those product options by developing those key technological and engineering capabilities within the Sony organization. Following these acts of strategic management, the act of commiting to develop a new product like the Walkman can be viewed as an almost anti-climatic exercise of one option among the many strategic options consequently available to Sony.

Finally, consider the current "high-commitment" move by Sony to introduce a recordable digital audio format -- the Sony mini-disc, or "MD" -- for consumer use, which it hopes will become the *de facto* industry standard for consumer digital recording and playing devices in the 1990s. The rewards to success in this effort will probably be among the richest available in the consumer electronics industry in the 1990s. While Sony is no doubt therefore committed to succeeding in making MD the

preferred format for personal digital recording if it possibly can, Sony has also prudently (and quietly) cross-licensed its MD technology to arch-rival Philips Consumer Electronics of the Netherlands in return for access to Philips' competing digital compact cassette (DCC) technology. This cross-licensing agreement, of course, gives Sony the option to switch technologies in the event that Philips beats out Sony and succeeds in making DCC the industry standard format for digital recording.

One wonders in this case whether the front line staff charged with developing and promoting Sony's MD products -- who have no doubt been asked by Sony to commit to doing everything they possibly can to make MD the dominant digital recording format in the 1990s -- are actually demotivated by Sony's cross-licensing agreement for Philips' DCC technology. I would speculate that the front lines of Sony are not demotivated at all, but (like Sony's strategic managers) are realists who understand that if Sony's MD technology should fail in spite of their best efforts, Sony's strategic option to convert to Philips' DCC technology assures Sony's managers and staff both of organizational continuity and of essentially a sure chance to participate in the personal digital recording product markets of the 1990s.

In sum, then, examples of commitment followed by success usually make inspirational stories, but they do not constitute a sufficient basis for improving our understanding of competitive strategy. If there is a theory of strategy that can be extracted from the commitment stories, it resides in the preceding work of strategic managers who created a strategic option worthy of commitment, not in the eventual act of commitment itself.

REFERENCES

Bartlett, Christopher A., (1993). *Commentary: Strategic Flexibility, Firm Organization, and Managerial Work in Dynamic Markets*, pp. 293-298 in *Advances in Strategic Management*, Volume 9, P. Shrivastava, A. Huff, and J. Dutton, editors, JAI Press Inc.

Hamel, Gary, and Prahalad, C.K.,(1993). "Strategy as Stretch and Leverage: Getting the Maximum from Available Resources," *Harvard Business Review*, Volume 71, March-April 1993, pp. 75-84.

Sanchez, Ron, (1991). *Strategic Flexibility, Real Options, and Product-Based Strategy*, unpublished MIT Ph.D. dissertation, Cambridge, MA 02139.

Sanchez, Ron, (1993). *Strategic Flexibility, Firm Organization, and Managerial Work in Dynamic Markets: A Strategic Options Perspective*, pp. 251-291 in *Advances in Strategic Management*, Volume 9, P. Shrivastava, A. Huff, and J. Dutton, editors, JAI Press Inc.

Sanchez, R., and Sudharshan, D. (1992). Real-time market research: Learning-by-doing in the development of new products. In *Proceedings of the first international conference on the management of product development.* Brussels: European Institute for Advanced Studies in Management.

Sanderson, S., and Uzumeri, V. (1990). *Strategies for new product development and renewal: Design-based incrementalism"* (Working Paper). Troy, NY: Center for Science and Technology Policy, Rensalaer Polytechnic Institute.